



XBRL Around the World

A look beyond U.S. shores to put the
SEC's interactive data initiative in a global context

by Karen Kernan

XBRL is evolving everywhere, but unevenly, driven by various stakeholders such as governments, stock exchanges, banks and other industry sectors. While the SEC has been finalizing its proposed rule requiring public companies and mutual funds to file their financial reports in interactive data, this article looks beyond U.S. shores to put the United States' progress in a global context.

XBRL, or "interactive data" as the SEC often refers to it, is an open information format standard that enables automated, global sharing of business information as contained in company ledgers, income statements, cash flow, balance sheets, mutual fund risk and returns, as well as textual in-

formation included within footnotes and other requirements of business reporting. XBRL doesn't change the accounting standards or methods used for financial and business reporting, but it puts reported information into an instantly reusable computer-readable format. Computer applica-

tions will automatically find comprehensive, granular data the instant it is posted online and flow it into analytical models for deep, automated analysis. XBRL is predicted to have a profound impact on any person or organization that creates or uses business information.

Seeking proof that this evolving language for financial and business information can deliver on its promises of superior data and vastly improved communication, the author interviewed key stakeholders around the world to see who the early adopters are and explore the many ways XBRL is already in use.

that can be read and used by computers.)

Various groups were interested in XBRL's early promise of efficient data gathering and automated analysis, but for different reasons. For example, tax regulators drove development in Ireland, municipalities in Germany, the banking sector in Spain, the Water Board in the Netherlands, and the Companies House in Denmark.

The second wave came as XBRL International's specification was released for commercial use in 2004. Based on work done by the Spanish central bank, the Committee of European Bank Supervisors started using XBRL for Basel II reporting across all 27 member states, though usage was mandatory or optional based on local country regulations.

Agency required all public companies to submit financial statements in XBRL format beginning this year. Japanese companies such as Wacoal and Fujitsu have begun to benefit from the use of XBRL for internal applications. In 2004, China became the first country to formally adopt XBRL reporting for its equity markets. Chinese innovation continues to lead XBRL into new areas such as risk profiling, data mining and communicating text information along with financial data.

XBRL is "extensible," meaning local users can extend XBRL taxonomies to satisfy their own needs, but can also extend themselves into isolation. Asian XBRL taxonomy developers often express the need for broader oversight, but unlike the EU,

XBRL is predicted to have a profound impact on any person or organization that creates or uses business information.

The third wave of XBRL development was inspired by the European Commission. Concerned with the disparity of projects, taxonomies being developed, and various standards being used by its 27 member states, the Commission in 2004 formally urged its member states to register their taxonomies with XBRL International (www.xbrl.org) and to work together on a truly open standard.

Just this year, XBRL Europe (www.xbrl.org/eu) was formed to generate better consistency, knowledge sharing, and cross-border interoperability of XBRL implementations. The new organization will present a unified voice before the European Parliament and the European Commission as they review XBRL projects. "The big challenge is not to have 27 flavors of XBRL that can't be aggregated across a very diverse region," says Conor O'Kelly, who chairs XBRL Europe's executive committee.

XBRL IN ASIA

In Asia, XBRL is being used by the capital markets. Stock exchanges in China, Japan, Singapore and South Korea all mandate XBRL data. Japan's Financial Services

Agency doesn't have a central authority that can mandate cross-border interoperability.

The role of the XBRL International consortium is to recognize the developing XBRL taxonomies of national and regional jurisdictions, and to encourage the creation of quality standards in taxonomy development. But XBRL neither mandates nor enforces local XBRL taxonomies. Many Asian developers expect the recently completed U.S. XBRL taxonomy to have a positive influence in advancing and harmonizing taxonomy development worldwide.

SPEED AND INNOVATION IN CHINA

For a more complete view of current and future implementations of XBRL in China, the author spoke with two active leaders in the XBRL China organization. Bai Shuo is the assistant general manager and CTO of the Shanghai Stock Exchange and a critical influence in the adoption of XBRL for public company reporting. (Shuo's comments represent the viewpoint of the XBRL organization, not the Shanghai Stock Exchange.) We also spoke with Shiping Liu, founder and CEO of Global

XBRL IN EUROPE

While the U.S. and Asia focus on XBRL for use in capital markets, Europe has developed an eye-opening array of governmentwide and cross-border applications that can share consistently structured XBRL data. The first wave of adoption in Europe started about five years ago, with stakeholders in the private and public sectors working together to develop XBRL taxonomies.

(Taxonomies are similar to dictionaries; they are long lists of agreed-upon definitions for all the terms used in specific types of business reports. Each definition has a "tag"

Business Intelligence Consulting Co., China's leader in data warehousing and data mining technology.

Both men reflected the enthusiasm that seems to infect the entire XBRL community. "Absolutely!" says Shuo. "The whole country was very excited by this new technology, especially people at the Chinese Securities Regulatory Commission and the Ministry of Finance." They began to seriously study its use in 2003. "We wanted to communicate with people from other parts," he said. They attended international meetings and invited experts from all over the world, including Charles Hoffman, the U.S. CPA credited as the inventor of XBRL, and Liv Watson, another pioneer, who was then vice president of Global Strategy at EDGAR Online Inc. Watson now chairs XBRL International's Development Committee. "We saw so much devotion and energy, and that influenced a lot of people in China," said Shuo.

EARLY MANDATES, NO-COST COMPLIANCE

A year later, in 2004, China was the first capital market to adopt XBRL. "The stock exchanges were interested in XBRL for better regulatory reporting," said Shuo. "But the dramatic change in the quality, granularity, and timeliness of the data has had the effect of changing the Western world's view of the Chinese market."

Along with public company reporting,

the Shanghai and Shenzhen stock exchanges have begun using XBRL for mutual funds' information releases and expect to use it soon for IPOs as well.

FUTURE DEVELOPMENTS: MINING DATA AND COMMUNICATING TEXT

In the near future, China XBRL expects to see extended use of XBRL for:

- Mutual fund reporting
- IPO approvals
- Non-official, internal financial reporting for smaller companies

Two areas of innovation for future Chinese XBRL applications include:

- Data mining applications for detecting financial fraud. Global Business Intelligence Consulting Co. is developing software to automatically mine the accumulated XBRL database to look for irregular behaviors.
- XBRL for communicating text. Expanded capability for XBRL to communicate additional textual information will allow companies to communicate more fully about their operations and plans, and to directly address an international audience.

HOW CHINA MOVED SO QUICKLY

In part, China was able to move so quickly because companies didn't actually switch to XBRL reporting. They continued to fill out the same forms they always used,

while behind-the-scenes software translated line items into XBRL data. This method of implementing XBRL allowed China's capital market to quickly adapt to the new information standard—with no cost of compliance for reporting companies.

The template-based report forms require less financial detail than, for example, the U.S. SEC's proposed rules. This made XBRL translation of Chinese reports relatively easy. Chinese data, XBRL or not, is a more generic, standardized dataset.

A downside of the "hidden" XBRL data generation is that Chinese companies are not going through the learning process U.S. companies now face to comply with the SEC's expected reporting rule. This knowledge is very important, says Shuo, in enabling or inspiring corporate financial professionals to extend what is a superior technology into their internal reporting processes, where they have the potential to realize greater benefits.

While China was the first to mandate XBRL for its equity markets, the sophistication of the XBRL rules and taxonomy have been developed in the West, particularly by the U.S., says Shuo.

The common language for financial and business reporting has already facilitated knowledge sharing and inspired change: The Chinese taxonomy and data collection is expanding, in part, based on what China's financial professionals are

EXECUTIVE SUMMARY

■ **While the United States and Asia focus on XBRL for use in capital markets,** Europe has developed an eye-opening array of governmentwide and cross-border applications that can share consistently structured XBRL data for both public and private companies.

■ **In Asia, as in the U.S., XBRL is being used by the capital market.** Stock exchanges in Japan and South Korea mandate XBRL data. In 2004, China be-

came the first country to formally adopt XBRL for financial reporting.

■ **In the near future, China XBRL expects to see extended use of XBRL for mutual funds reporting, IPO approvals, and non-official and internal financial reporting for smaller companies.**

■ **The U.S. is taking a progressive and carefully documented approach to implementing XBRL.** From a capital market perspective, the U.S. had far

more technical, legal and infrastructure issues to overcome than smaller countries. However, the SEC's proposed rule for U.S. equity markets will result in the world's most extensive implementation of XBRL.

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learning from the various taxonomies and underlying accounting standards of other countries. China, in turn, is adding to the international dialogue in other ways, such as its efforts to incorporate key information that is not captured in U.S. GAAP or IFRS, for example, key performance indicators and sustainability reporting.

INVESTOR USE OF CHINESE DATA

"XBRL will become more influential as the entire supply chain matures in its ability to use it," Shuo says. Chinese investors, even institutional investors, are not yet experienced with open financial markets and how best to use public company information. The availability of fast, accurate XBRL data is important, says Shuo, "But so is the understanding of data-based analysis and software tools to support it." XBRL data accumulating for the Chinese market cannot be fully leveraged by the Chinese financial markets without improved software applications for regulators, investors, accounting agencies, statisticians, governmental agencies and the reporting companies.

Ironically, analysts outside the mainland using English-based applications are already leveraging China's XBRL market data. The data is available from the Chinese stock exchange Web sites, directly from reporting companies, or via a direct market data feed. For instance, Credit Suisse HOLT has used XBRL to expand its coverage of the Chinese A-share market from 300 firms, which it previously tracked manually with a lot of cutting and pasting into spreadsheets, to well over 1,000, which it now tracks automatically.

XBRL IN THE UNITED STATES

Given the eye-opening progress of XBRL in the capital markets of Asia and Europe, does the coming U.S. mandate for public companies to report in XBRL format simply put the U.S. in a catch-up position?

Not so, says Campbell Pryde, chief standards officer for XBRL US, who is responsible for managing the development

of U.S. taxonomies. "The U.S. is the largest, most-developed capital market in the world, and no country has implemented XBRL to the extent that the SEC has proposed for U.S. equity markets."

The U.S., he says, is taking a very progressive and carefully documented approach, and if it has taken this long to "go live," it's because of the enormity of the task. From a capital market perspective, the U.S. has far more technical, legal and infrastructure issues to overcome than smaller countries:

- There are a huge number of stakeholders in the financial supply chain.
- U.S. accounting standards are highly developed.
- Corporate reporting requirements are complex and industry-specific and carry risk for errors (IFRS is more policy-based than industry-specific).
- U.S. companies disclose far more granular and also more contextual information than what is collected in countries that use more generic, template-based report forms, such as those used in China and Japan, and for private companies in Europe.
- The burden of compliance had to be low before the SEC could require the approximately 17,000 public companies and 8,000 mutual funds to start filing XBRL data.

THE U.S. TAXONOMY

Few outside the XBRL developer community understood the enormity of the accomplishment when the U.S. XBRL organization last May presented the SEC with the complete taxonomy for U.S. GAAP—a last remaining obstacle to going live. Broken out by industry sectors, the U.S. taxonomies currently in-

clude more than 12,400 XBRL tags and definitions for the standard accounting terms used in U.S. GAAP. This is nearly double the size of any other national taxonomy.

Even for those not involved in creating XBRL data, or who do not yet use XBRL-enabled financial software, it is worth taking a look at the U.S. XBRL taxonomy, available online (<http://xbrl.us/pages/us-gaap.aspx>). Viewers can quickly see how XBRL data is structured and extended. Each data point can be

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searched and used in automated analysis. Additionally, the US GAAP Taxonomies reference many of the related FASB standards and SEC Regulation SX sections, which not only enhance the transparency of reported information, but also transform how professionals use these resources relevant to company disclosures.

THE UNLIMITED FUTURE IN THE WORLD OF INTERACTIVE DATA

What happens as the world's financial supply chain begins to share a single language for interactive financial and business information? Investors will be able to find numbers they can understand on hundreds of companies around the world. They will be able to find comparable data automatically, at low or no cost, on a variety of Web sites.

Conor O'Kelly, who is also vice chairman of XBRL International, expects the next global wave of XBRL development to be in standard business reporting projects, looking at how government agencies can unify and simplify data collection. The Netherlands is leading this wave, with Australia and New Zealand close behind. There's no technical reason there should not be one central repository for all government data collection and

Europe's XBRL Leader

Since the Spanish central bank knew it could not compete as Europe's largest player, it was determined to become Europe's most efficient.

When the European Commission (EC) announced its new XBRL reporting initiative, the bank shifted its focus to the larger issue of a standard communication platform for efficient cross-border communications and presented a surprised EC with a list of the business requirements it had already defined, that could serve the European Union's larger XBRL project.

The central bank was not alone in Spain's close-knit community of financial professionals who had been studying XBRL. Members of the newly formed XBRL Spain organization included market regulators, representatives of government agencies, public and private businesses, and more.

Under the central bank's leadership, XBRL Spain consolidated various XBRL initiatives and began in earnest to develop national taxonomies for financial reporting and for data exchange between financial institutions, including COREP, the common reporting framework for credit institutions and investment firms in the European Union; FINREP, the financial reporting for credit institutions that use IAS/IFRS for their published financial statements and periodic reports required by supervisory authorities; and SE-PLAC, a system for the prevention of money laundering and other illegal monetary transactions.

XBRL was adopted for the entire banking industry in Spain, soon followed by the capital markets. Now the focus is on Spain's governmentwide approach, including XBRL reporting by municipalities and private companies. XBRL Spain is working with software vendors to XBRL-enable standard accounting applications so they can automatically generate XBRL data associated with reports.

dissemination to the public.

The SEC has created an Interactive Disclosure office, which is expected to look beyond quarterly and annual reporting, to study the general issue of data collection and the creation of central repositories. Large data repositories could be used for all types of information collected from the marketplace, such as a central repository for mutual funds, which are now reported separately.

XBRL is simply structured data. Such a language does not have to be confined to IFRS or U.S. GAAP, or to any national language, as nicely demonstrated by the Israeli "Manga" system that lets users simply toggle to see information in English. Today, XBRL taxonomies accommodate more

than 30 regional languages. As SEC Chairman Christopher Cox remarked, "This is so obviously what computers were made for, it's hard to believe investors could never do this before."

There are huge opportunities for gathering statistical data, or information in the health industry or for environmental pollution control compliance, resource management, oil and gas reserves, and more. Already, the Global Reporting Initiative (www.globalreporting.org), a group committed to sustainability, has developed an XBRL taxonomy for the many indicators itemized in its sustainability framework, to automate and support more sustainability reporting.

"It's going to be interesting to see how XBRL in the United States seeps

down from regulatory filings and works its way into the general market," says Liv Watson. "XBRL will gain its foothold in regulatory filings, but as the market finds its comfort zone, it will quickly see XBRL's potential for broader financial reporting, internal reporting, scorecarding and general knowledge management."

XBRL is even being used in the poorest emerging countries. The Microfinance Information Exchange Inc. (MIX), which acts as a clearinghouse, tracks the performance of nearly 1,000 microfinance institutions and has adopted XBRL as the core technology. The goal of improved information exchange and reporting is to encourage investment and success for microfinance projects worldwide.

"We are creating market enablement—we are creating a standard that will allow the market to exchange information more efficiently, with greater transparency and interoperability, with more efficient flow of capital," says XBRL Europe's O'Kelly. "But we can't predict what the market will do with these capabilities. It's like creating the MP3 format: the developers knew it worked to play music files, but they couldn't have envisioned Napster or iTunes. The role of international developers is just to make sure there is a robust, scalable, interoperable open standard for the market to use in whatever ways it will find." ♦

AICPA RESOURCES

JofA articles

- "Six Steps to XBRL," Feb. 08, page 34
- "ROI on XBRL," June 07, page 32

Web site

Information Technology Center,
<http://infotech.aicpa.org/Resources/XBRL>

OTHER RESOURCES

- XBRL US, <http://xbrl.us>
- XBRL International, www.xbrl.org

■ **Tax Treatment of Rebates May Be Clearing Up** page 42



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■ **A Showcase of Tax Research** page 48



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■ **Derivatives and Hedging: Accounting vs. Taxation** page 54



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■ **XBRL Around the World** page 62



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■ **Better Brainstorming** page 70



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(Continued on page 14)